

Figure 1

SEQ ID	No.1	CTCAGAACCGTCTCGGAA (→)
AF196835	CAACCCAGGAGGACTGGGTGAACAAAGCCGCGAAGTGA	TCCATGTAAGCC CTCAGAACCGTCTCGGAAAGGAGGACCCACACATGTTGTAACCTTCAAAG
AF260968	.....T.....	.....
AF260969	.....	.....
AF481864	.....C.....	.....G.C.T.G.C.....
M12294	.....T.....	.....
AF206518	.....	.....
AF317203	.....	.....
AF202541	.....	.....
AF404757	.....T.....	.....
AF404753	.....	.....
AF404754	.....	.....
AF404755	.....	.....
AF404756	.....	.....
AF017254	.....T.....	.....G.C.T.G.C.....
L48977	.....C.....	.....
AF196536	.....	.....
AF196537	.....T.G.C.....	.....T.....G.C.....
AF196538	.....T.G.C.....	.....T.....GT.C.....
AF196540	.....T.G.C.....	.....T.....GT.C.....
AF196541	.....	.....
AF196542	.....	.....
AF196543	.....T.C.....	.....C.....A.....T.G.C.....G.....
AF297840	.....T.....	.....C.....A.....G.....G.....G.....
AF458343	.....	.....
AF458344	.....T.....	.....
AF458347	.....T.....	.....
AF458348	.....	.....
AF458350	.....	.....
AF458352	.....T.G.C.....	.....C.....T.....GT.Y.....
AF458353	.....T.G.C.....	.....T.....GT.C.....
AF458355	.....T.....	.....
AF458358	.....T.C.....	.....C.....A.....T.G.C.....G.....
AF458360	.....	.....
AF458361	.....	.....
AF208017	.....C.....T.G.....	.....G.C.T.G.C.....
AF196539	.....C.....T.G.....	.....G.C.T.G.C.....
AF196535	.....C.....G.....	.....G.C.T.G.C.....G.....
AF458359	.....C.....T.G.....	.....G.C.T.G.C.....
AF458357	.....C.....G.....	.....G.C.T.G.C.....
AF458354	.....C.....T.G.....	.....G.C.T.G.C.....

AF458349	.....	C.....	C.T.....	G.....	.....	.....	.....	G.C.T.G.C.....
AF458345	.....	C.....	T.....	G.....	.....	.....	.....	G.C.T.G.C.....
AF458346	.....	C.....	T.....	G.....	.....	T.....	.....	G.C.T.G.CC.....
AF533540	.....	.....	.....	.....	.....	.....	.....	.....
AY187012	.....	.....	.....	.....	.....	.....	.....	.....
AY187013	.....	.....	.....	G.....	.....	.....	.....	.....
AY187014	.....	.....	.....	.....	.....	.....	.....	.....
AY187015	.....	.....	.....	.....	.....	.....	.....	.....
AY262283	.....	.....	.....	.....	.....	.....	.....	.....
AY277251	.....	AT.T.....	AT.G.C.....	.....	C.....	AT.....	T.....	C.....
AY277252	.....	.....	.....	.....	.....	.....	.....	.....
AY278441	.....	.....	.....	.....	.....	.....	.....	.....
AY278442	.....	.....	.....	.....	.....	.....	.....	.....
AY268132	.....	.....	.....	.....	.....	A.....	.....	.....
AY268133	.....	.....	.....	.....	.....	.....	.....	.....
AY490240	.....	.....	T.....	.....	.....	.....	.....	.....
Kunjin	.....	.....	.....	.....	.....	.....	.....	.....
D00246	.....	.....	T.....	.....	.....	.....	.....	A.....
AY274504	.....	.....	T.....	.....	.....	.....	.....	A.....
AY274505	.....	.....	T.....	.....	.....	.....	.....	A.....
L49311	.....	.....	T.....	G.....	.....	C.....	.....	A.....
L48978	.....	.....	T.....	.....	.....	.....	.....	A.....
L48979	.....	.....	T.....	.....	.....	.....	.....	A.....
AF297840	.....	.....	T.....	.....	.....	.....	C.....	A.....
AF297841	.....	.....	T.....	.....	.....	.....	.....	A.....
AF297842	.....	.....	T.....	.....	.....	.....	.....	A.....
AF297843	.....	.....	T.....	.....	.....	.....	.....	A.....
AF297844	.....	.....	T.....	.....	.....	.....	.....	A.....
AF297845	.....	.....	T.....	.....	.....	.....	.....	A.....
AF297846	.....	.....	T.....	.....	.....	.....	C.....	A.....
AF297847	.....	T.....	T.....	.....	.....	.....	C.....	A.....
AF297848	.....	.....	T.....	.....	.....	.....	.....	A.....
AF297849	.....	.....	T.....	.....	.....	.....	.....	A.....
AF297850	.....	.....	T.....	.....	.....	.....	C.....	A.....
AF297851	.....	.....	T.....	.....	.....	.....	C.....	GTA.....
AF297852	.....	.....	T.....	.....	.....	.....	C.....	.....
AF297853	.....	.....	T.....	.....	.....	.....	C.....	.....
AF297854	.....	.....	T.....	.....	.....	.....	C.....	.....
AF297855	.....	.....	T.....	.....	.....	.....	.....	A.....
AF297856	.....	.....	T.....	.....	.....	.....	.....	A.....
AF297857	.....	G.....	T.....	.....	.....	.....	.....	A.....
AF297858	.....	.....	.....	.....	.....	G.....	.....	A.....
AF297859	.....	.....	T.....	.....	.....	.....	.....	A.....

AF458351	.....T.....	.....G.A.....	.....G.....G.....
AF458356	.....T.....	.....C.....A.....	.....G.....G.....
L24512	.....T.....	.....A.....	.....G.....G.....
JEV	.....	.....	.....
AB051292	..GTT.....T.....T.T.AC.CG.AGGTGA.A.....	.....C..T...TG.GCACC.G..G..G....	
AF014160	..GT.....T.....T.T.AC.TA.AAGTGA.A.....	.....C..T...TG.TCAC.G..G..G....	
AF014161	..GT.....T.....T.T.AC.TA.AAGTGA.A.....	.....C..T...TG.TCAC.G..G..G....	
AF045551	..GTT.....T.....T.T.AC.CG.AGGTGA.A.....	.....C..T...TG.TCAC.G..G..G....	
AF069076	..GT.....T.....T.T.AC.CA.AAGTGA.A.....	.....C..T...TG.TCAC.G..G..G....	
AF075723	..GT.....C.....T.....T.T.AC.CA.GAGTGA.A.....	.....C..T...TG.TCAC.G..G..G....	
AF080251	..GT.....T.....T.T.AC.CA.AAGTGA.A.....	.....G.....T..T...TG.TCAC.G..G..G....	
AF098735	..GT.....T.....T.T.AC.CA.AAGTGA.A.....	.....C..T...TG.TCAC.G..G..G....	
AF098736	..GT.....T.....T.T.AC.CA.AAGTGA.A.....	.....C..T...TG.TCAC.G..G..G....	
AF098737	..GT.....T.....T.T.AC.CA.AAGTGA.A.....	.....C..T...TG.TCAC.G..G..G....	
AF217620	..GTT.....T.....T.T.AC.CA.AGGTGA.A.....	.....T..T...TG.TCAC.G..G..G....	
AF221499	..GT.....T.....T.T.AC.CA.AAGTGA.A.....	.....T..T...TG.TCAC.G..G..G....	
AF221500	..GT.....T.....T.T.AC.CA.AAGTGA.A.....	.....T..T...TG.TCAC.G..G..G....	
AF254452	..GT.....T.....T.T.AC.CA.AAGTGA.A.....	.....C..T...TG.TCAC.G..G..G....	
AF254453	..GT.....A.....T.....T.T.AC.CA.AAGTGA.A.....	.....C..T...TG.TCAC.G..G..G....	
AF315119	..GT.....T.....T.T.AC.CA.AAGTGA.A.....	.....T..T...TG.TCAC.G..G..G....	
AF416457	..GT.....T.....T.T.AC.CAA.AAGTGA.A.....	.....T..T...TG.TCAC.G..G..G....	
AF486638	..GT.....T.....T.T.AC.CA.AAGTGA.A.....	.....C..T...TG.TCAC.G..G..G....	
U14163	..GT.....T.....T.T.AC.CA.AAGTGA.A.....	.....T..T...TG.TCAC.G..G..G....	
U15763	..GT.....T.....T.T.AC.CA.AAGTGA.A.....	.....T..T...TG.TCAC.G..G..G....	
L48961	..GT.....T.....T.T.AC.CG.AAGTGA.A.....	.....T..T...TG.TCAC.G..G..G....	
U47032	..GT.....T.....T.T.AC.CA.AAGTGA.A.....	.....T..T...TG.TCAC.G..G..G....	
M18370	..GT.....T.....T.T.AC.CA.AAGTGA.A.....	.....T..T...TG.TCAC.G..G..G....	
M55506	..GT.....T.....T.T.AC.CA.AAGTGA.A.....	.....T..T...TG.TCAC.G..G..G....	
D90195	..GT.....T.....T.T.AC.CA.AAGTGA.A.....	.....T..T...TG.TCAC.G..G..G....	
D90194	..GT.....T.....T.T.AC.CA.AAGTGA.A.....	.....T..T...TG.TCAC.G..G..G....	
AF311748	..GT.....T.....T.T.AC.CA.AAGTGA.A.....	.....T..T...TG.TCAC.G..G..G....	
AF092550	..GTT.....T.....T.T.AC.CA.AAGTGA.A.....	.....T..T...TG.TCAC.G..G..G....	
AF092552	..GTT.....T.....T.T.AC.CA.AAGTGA.A.....	.....T..T...TG.TCAC.G..G..G....	
AF092553	..GTT.....T.....T.T.AC.CA.AAGTGA.A.....	.....T..T...TG.TCAC.G..G..G....	
AF139531	..GTT.....T.....T.T.AC.CA.AAGTGA.A.....	.....T..T...TG.TCAC.G..G..G....	
AF148900	..GTT.....T.....T.T.AC.CA.AAGTGA.A.....	.....T..T...TG.TCAC.G..G..G....	
AF148901	..GTT.....T.....T.T.AC.CA.AAGTGA.A.....	.....T..T...TG.TCAC.G..G..G....	
AF148902	..GTT.....T.....T.T.AC.CA.AAGTGA.A.....	.....T..T...TG.TCAC.G..G..G....	
AF218068	..GTT.....T.....T.T.AC.CA.AAGTGA.A.....	.....T..T...TG.TCAC.G..G..G....	
AF289816	..GT.....T.....T.T.AC.CG.AGGTGA.A.....	.....T..T...TG.TCAC.G..G..G....	
AF318291	..GT.....T.....T.T.AC.CG.AGGTGA.A.....	.....T..T...TG.TCAC.G..G..G....	
L48967	..GTT.....T.....T.T.AC.CA.AAGTGA.A.....	.....T..T...TG.TCAC.G..G..G....	
L48968	..GTT.....T.....T.T.AC.CA.AAGTGA.A.C.....	.....T..T...TG.TCAC.G..G..G....	

AY184212	..GT.....	C.....	T.T.AC..CG..	GAGTGA.A.....	A.....	T.....	TG.TCAC..G.TG..GG...	
AY251616	..GT.....	T.....	T.T.AC..CG..	AGGTGG.A.....	T.....	T.....	TG.TCAC..G.G..G..G...	
AY278556	..GTT.....	T.....	T.T.AC..CG..	AGGTGG.A.....	C.....	T.....	TG.TCAC..G.G..G..G...	
AY316157	..GTT.....	T.....	T.T.AC..CG..	AGGTGG.A.....	..A.....	C.....	T.....	TG.TCAC..G.G..G..G...
L54067	..GTT.....	T.....	T.T.AC..CA..	AGGTGA.A.....	T.....	T.....	TG.TCAC..G.G..G..G...	
L54068	..GTT.....	T.....	T.T.AC..CA..	AGGTGA.A.....	T.....	T.....	TG.TCAC..G.G..G..G...	
L54069	..GTT.....	T.....	T.T.AC..CA..	AGGTGA.A.....	T.....	T.....	TG.TCAC..G.G..G..G...	
L54070	..GTT.....	T.....	T.T.AC..CA..	AGGTGA.A.....	T.....	T.....	TG.TCAC..G.G..G..G...	
L54071	..GTT.....	T.....	T.T.AC..CA..	AGGTGA.A.....	T.....	T.....	TG.TCAC..G.G..G..G...	
L54072	..GTT.....	T.....	T.T.AC..CA..	AGGTGA.A.....	T.....	T.....	TG.TCAC..G.G..G..G...	
L54122	..GTT.....	T.....	T.T.AC..CA..	AGGTGA.A.....	T.....	T.....	TG.TCAC..G.G..G..G...	
L54123	..GTT.....	T.....	T.T.AC..CA..	AGGTGA.A.....	T.....	T.....	TG.TCAC..G.G..G..G...	
AF306514	..GTT.....	T.....	T.T.AC..CG..	AGGTGG.A.....	CTCCT.....	TT.....	TT.TCAC..G.G..G..G...	
AF306515	..GT.....	C.....	TTT.AC..CA..	AAGTGA.A.....	T.....	T.....	TT.TCAC..G.G..G..G...	
AF306516	..TT.....	T.....	TTT.AC..CA..	AAGTGA.A.....	T.....	T.....	TT.TCAC..G.G..G..G...	
AF306517	..GT.....	T.....	T.T.AC..CA..	AGGTGA.A.....	..A.....	T.....	TT.TCAC..G.G..G..G...	
SLEV								
BFS1750-C	TGG.....	T.T.....	AATCT.GCCGAGT	GCA.....	C.....	TT..A.....	G...GTCC.TAGCACGCTAG.CTGGAGAGG.C	
1750-Std	TGG.....	T.T.....	AATCT.GCCGAGT	GCA.....	C.....	TT..A.....	G...GTCC.TAGCACGCTAG.CTGGAGAGG.C	
TD6-4G-C	TGG.....	T.T.....	AATCT.GCCGAGT	GCA.....	C.....	TT..A.....	G...GTCC.TGGCACGCTAG.CTGGAGAGG.C	
TD6-4G-20	TGG.....	T.T.....	AATCT.GCCGAGT	GCA.....	C.....	TT..A.....	G...GTCC.TGGCACGCTAG.CTGGAGAGG.C	
CoaV750	TGG.....	T.C.....	AATCT.GCTGAGT	GCA.....	C.....	TT..AT.....	G...GTCC.TGGCACGCTAG.CTGGAGAGG.C	
L695121.05	TGG.....	T.T.....	AATCC.GCTGGGT	GCA.....	C.....	TT..A.....	G...GTCC.TGGCATGCTAG.CTGGAGAGG.C	
TNM771K-C	TGG.....	C.T.....	AATCT.GCTGGGT	GCA.....	C.....	TT..A.....	G...GTCC.TGGCACGCTAG.CTGGAGAGG.C	
MSI-7-C	TGG.....	T.T.....	AATCC.GCTGGGT	GCA.....	C.....	TT..A.....	G...GTCC.TGGCACGCTAG.CTGGAGAGG.C	
Kern217	TGG.....	T.T.....	AATCC.GCTGGGT	GCA.....	C.....	TT..A.....	G...GTCC.TGGCACGCTAG.CTGGAGAGG.C	
CoaV608	TGG.....	T.T.....	AATCC.GCTGGGT	GCA.....	C.....	TT..A.....	G...GTCC.TGGCACGCTAG.CTGGAGAGG.C	
TBH-28	TGG.....	T.T.....	AATCC.GCTGGGT	GCA.....	C.....	TT..A.....	G...GTCC.TGGCACGCTAG.CTGGAGAGG.C	
VR1265	TGG.....	T.T.....	AATCT.GCTGGGT	GCA.....	C.....	TT..A.....	G...GTCC.TGGCACGCTAG.CTGGAG.GG.C	
CoaV353	TGG.....	T.T.....	AATCT.GCTGGGT	GCA.....	C.....	TT..A.....	G...GTCC.TGGCACGCTAG.CTGGAGAGG.C	
MVEV								
VR77								
AF161266		T.C.....	T.ATTCTCC.CGGTTG	A.....	T.C.....	AG.AGT...	TGCCACAATGGAGATG.A	
M35172		T.C.....	T.ATTCTCC.CGGTTG	A.....	T.C.....	AG.AGT...	TGCCACAATGGAGATG.A	
L48972		T.C.....	T.ATTCTCC.CGGTTG	A.....	T.C.....	AG.AGT...	TGCCACAATGGAGATG.A	
L48973		T.C.....	T.ATTCTCC.CGGTTG	A.....	T.C.....	AG.AGT...	TGCCACAATGGAGATG.A	
L48974		T.C.....	T.ATTCTCC.CGGTTG	A.....	T.C.....	AG.AGT...	TGCCACAATGGAGATG.A	
L48975		T.C.....	T.ATTCTCC.CGGTTG	A.....	T.C.....	AG.AGT...	TGCCACAATGGAGATG.A	
L48976		T.C.....	T.ATTCTCC.CGGTTG	A.....	T.C.....	AG.AGT...	TGCCACAATGGAGATG.A	
Koutango virus								
L48980		C.....	T.T....G.A..	....C....	T.....	....G....	T...TTCT.....

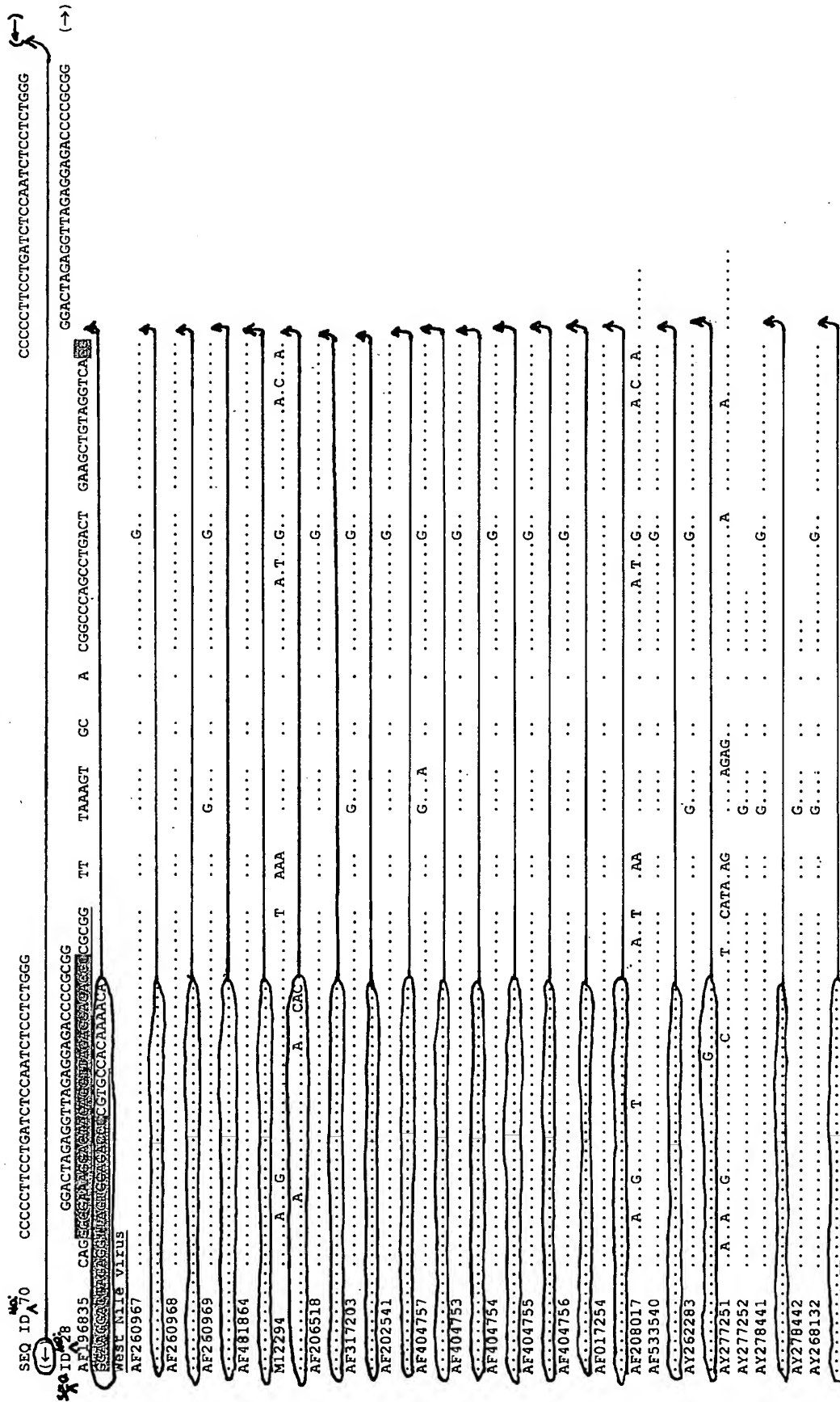
Figure 2

SEQ ID No: 9
24

AF196835	TGACT	GAAGCTGTAGGTCAGG	GGAAGGACTAGAGGTTAGTGAGACCCCGTGCCACAAAACACACATATTGACACCTGGGA	TAAGTATCCTCT
AF260967	.G.	.....	.....	.....
AF260968	.....	.....	.....	.....
AF260969	.G.	.....	.....	.....
AF481864	.....	.....	.....	.....
M12294	.G.	.....A.C.A.	.....A.G.	.....G.
AF206518	.G.	.....	.....	.....
AF317203	.G.	.....	.....	.....
AF202541	.G.	.....	.....	.....
AF404757	.G.	.....	.....	.....
AF404753	.G.	.....	.....	.....
AF404754	.G.	.....	.....	.....
AF404755	.G.	.....	.....	.....
AF404756	.G.	.....	.....	.....
AF017254	.....	.....	.....T	.....
AF533540	.G.	.....	.....G	.....
AY262283	.G.	.....	.....	.....
AY278441	.G.	.....	.....	.....
AY268132	.G.	.....	.....	.....
AY268133	.G.	.....	.....	.....
Kunjin	.....	.....	.....	.....
AY274504	.G.	.....	.....G	.....
AY274505	.G.	.....	.....G	.....
L24512	.G.	.....	.....G	.....
JEV	.....	.....	.....	.....
AB051292	CCC.C	.....G.AGG..T	.....A	TTG..T.....A.....G.....
AF014160	CCC.C	.....AGG..T	.....A	TTG..T.....A.....G.....
AF014161	CCC.C	.....AGG..T	.....A	TTG..T.....A.....G.....
AF045551	CCC.C	.....AGG..T.T	.....A	TTTG..T.....A.....G.....
AF069076	CCC.C	.....AGG..T	.....A	TTG..T.....A.....G.....
AF075723	CCC.C	.....AGG..T	.....A	TTG..T.....A.....G.....
AF080251	CCC.C	.....AGG..T	.....A	TTG..T.....A.....G.....
AF098735	CTC.C	.....AGG..T	.....A	TTG..T.....A.....G.....
AF098736	CCC.C	.....AGG..T	.....A	TTG..T.....A.....G.....
AF098737	CCC.C	.....AGG..T	.....A	TTG..T.....AGA.....G.....
AF217620	.TC.C	.....AGG.A.T	.....A	TTG..T.....A.....G.....
AF221499	CTC.C	.....AGG..T	.....A	TTG..T.....A.....G.....
AF221500	CTC.C	.....AGG..T	.....A	TTG..T.....A.....G.....
AF254452	CCC.C	.....AGG..T	.....A	TTG..T.....A.....G.....
AF254453	CCC.C	.....AGG..T	.....A	TTG..T.....A.....G.....
AF315119	CCC.C	.....AGG..T	.....A	TTG..T.....A.....G.....

AF416457	CCC..C.....	AGG..T.....	A.....	CAT	TTG..T.....	A.....G.....
AF486638	CCC..C.....	AGG..T.....	A.....	CAT	TTG..T.....	A..T...G.....
U14163	CCC..C.....	AGG..T.....	A.....	CAT	TTG..T.....	A.....G.....
U15763	CCC..C.....	AGG..T.....	A.....	CAT	TTG..T.....	A.....G.....
U48961	CTC..C.....	AGG..T.....	A.....	CAT	TTG..T.....	A.....G.....
U47032	CCC..C.....	AGG..T..G.....	A.....	CAT	TTG..T.....	A.....G.....
M18370	CCC..C.....	AGG..T.....	A.....	CAT	TTG..T.....	A.....G.....
M55506	CCC..C.....	AGG..T.....	A.....	CAT	TTG..T.....	A.....G.....
L78128	CCC..C.....	AGG..T.....	A.....	CAT	TTG..T.....	A.....G.....
D90195	CCC..C.....	AGG..T.....	A.....	CAT	TTG..T.....	A.....G.....
D90194	CCC..C.....	AGG..T.....	A.....	CAT	TTG..T.....	A.....G.....
AF311748	CCC..C.....	AGG..T.....	A.....	CAT	TTG..T.....	A.....G.....
AY184212	CCCT..C.....	AGG..T.....	A.....	CAT	TTG..T.....	A.....G.....
AY316157	CCC..C.....	AGG..T.....	A.....	CAA	TTG..T.....	A.....G.....
AF306514	CCC..C.....	AGG..T..T.....	A.....	CAA	TTG..T.....	A.....G.....
AF306515	CCC..C.....	AGG..T.....	A.....	CAT	TTG..T.....	A.....G.....
AF306516	CCC..C.....	AGG..T.....	A.....	CAT	TTG..T.....	A.....G.....
AF306517	CCC..C.....	AGG..T.....	A.....	CAT	TTG..T.....	A.....G.....
D00037	CCT..T..T.....	T..T..T.....	T..T.....	CT	TTG..T.....	A.....G.....
M14933	CCT..T..T.....	T..T..T.....	T..T.....	CT	TTG..T.....	A.....G.....
SLEV						
BFS1750-C	CCG..C.....	AGAC..G.....	A.....	T...G TT...G	A.....	A.....
.1750-Std	CCG..C.....	AGAC..G.....	A.....	T...G TT...G	A.....	A.....
TD6-4G-C	CCG..C.....	AGAT..G.....	A.....	T...G TT...G	A.....	A.....
TD6-4G-20	CCG..C.....	AGAT..G.....	A.....	T...G TT...G	A.....	A.....
CoaV750	CCG..C.....	AGAT..G.....	A.....	T...G TT...G	A.....	A.....
L695121.05	CCG..C.....	AGAC..G.....	A.....	T...G TT...G	A.....	A.....
TNM771K-C	CCG..C.....	AGAC..G.....	A.....	T...G TT...G	A.....	A.....
MSI-7-C	CCG..CA.....	AGAC..G.....	A.....	T...G TT...G	A.....	A.....
Kern217	CCG..CA.....	AGAC..G.....	A.....	T...G TT...G	A.....	A.....
CoaV608	CCG..CA.....	AGAC..G.....	A.....	T...G TT...G	A.....	A.....
TBH-28	CCG..C.....	AGAC..G.....	A.....	T...G TT...G	A.....	A.....
VR1265	CCG..C.....	AGAC..G.....	A.....	T...G TC...G	A.....	A.....
CoaV353	CCG..C.....	AGAC..G.....	A.....	T...G TT...G	A.....	A.....
MVEV						
VR77	.CG.C.....	A.G.G..T...C.....	A.....	ACT..T.....	.G .AT... C.....	AA.....
AF161266	.CG.C.....	A.G.G..T...C.....	A.....	ACT..T.....	.G .AT... C.....	AA.....
M35172	.CG.C.....	A.G.G..T...C.....	A.....	ACT..T.....	.G .AT... C.....	AA.....

Figure 3*



AY268133G..

AY490240G..

Kunjin virus

AY274504 ...A.T.....T.C.G....G..

AY274505 ...A.T.....T.C.G....G..

L24512 ...A.T.....T.C.G....G..

.....G..

Japanese encephalitis virus

AB051292 .TA.T.T.....T..AAA C..CA TT .TG.....AG.CCC..

C.....G.AGG..T.....A.....CATTGC.TCA..

AF014160 .GA.T.T.....T..AAA C..CA A. .TG.....AG.CCC..

C.....AGG..T.....A.....CATTGC.TCA..

AF014161 .GA.T.T.....T..AAA C..CA A. .TG.....AG.CCC..

C.....AGG..T.....A.....CATTGC.TCA..

AF045551 .TTA.T.T.....T..AAA C..AA TT .TG.....AG.CCC..

C.....AGG..T.T.....A.....CAATTGC.T..

AF069076 .GA.T.T.....T..AAA C..CA A. .TG.....AG.CCC..

C.....AGG..T.....A.....CATTGC.TCA..

AF075723 .GA.T.T.....T..AAA T..CA A. .TG.....AG.CCC..

C.....AGG..T.....A.....CATTGC.TCA..

AF080251 .GA.T.T.....T..AAA C..CA A. .TG.....AG.CCC..

C.....AGG..T.....A.....CATTGC.TCA..

AF098735 .GA.T.T.....T..AAA C..CA A. .TG.....AG.CTC..

C.....AGG..T.....A.....CATTGC.TCA..

AF098736 .GA.T.T.....T..AAA C..CA A. .TG.....AG.CCC..

C.....AGG..T.....A.....CATTGC.TCA..

AF098737 .GA.T.T.....T..AAA C..CA A. .TG.....AG.CCC..

C.....AGG..T.....A.....CATTGC.TCA..

AF217620 .GA.T.T.....T..AAA C..CA AT .TG.....AG.TC..

C.....AGG..T.....A.....CATTGC.TCA..

AF221499 .GA.T.T.....T..AAA C..TA A. .TG.....AG.CTC..

C.....AGG..T.....A.....CATTGC.TCA..

AF221500 .GA.T.T.....T..AAA C..TA A. .TG.....AG.CTC..

C.....AGG..T.....A.....CATTGC.TCA..

AF254452 .GA.T.T.....T..AAA C..CA A. .TG.....AG.CCC..

C.....AGG..T.....A.....CATTGC.TCA..

AF254453 .GA.T.T.....T..AAA C..CA A. .TG.....AG.CCC..

C.....AGG..T.....A.....CATTGC.TCA..

AF315119 .GA.T.T.....T..AAA C..CA A. .TG.....AG.CCC..

C.....AGG..T.....A.....CATTGC.TCA..

AF416457 .GA.T.T.....T..AAA C..CA A. .TG.....AG.CCC..

C.....AGG..T.....A.....CATTGC.TCA..

AF486638 .GA.T.T.....T..AAA C..CA A. .TG.....AG.CCC..

C.....AGG..T.....A.....CATTGC.TCA..

U14163 .GA.T.T.....T..AAA C..CA A. .TG.....AG.CCC..

C.....AGG..T.....A.....CATTGC.TCA..

U15763	.GA..T.T.....T...AAA	C..CA	A.	.TG.....AG.CCC..
L48961	.GA..T.T.....T...AAA	C..CA	A.	.TG.....AG.CTC..
U47032	.GA..T.T.....T...AAA	C..CA	A.	.TG.....AG.CCC..
M18370	.GA..T.T.....T...AAA	C..CA	AT	.TG.....AG.CCC..
M55506	.GA..T.T.....T...AAA	C..CA	A.	.TG.....AG.CCC..
L78128	.GA..T.T.....T...AAA	C..CA	A.	.TG.....AG.CCC..
D90195	.GA..T.T.....T...AAA	C..CA	AT	.TG.....AG.CCC..
D90194	.GA..T.T.....T...AAA	C..CA	A.	.TG.....AG.CCC..
AF311748	.GA..T.T.....T...AAA	C..CA	A.	.TG.....AG.CCC..
AY184212	.GA..T.T.....T...AAA	C..CA	A.	.TG.....AG.CCCT..
AY316157	.GA..T.T.....T...AAA	C..CA	T.	.TG.....AG.CCC..
AF306514	.GA..T.T.....T...AAA	C..AA	TT	.TG.....AG.CCC..
AF306515	.GA..T.T.....T...AAA	C..AA	AA	.TG.....AG.CCC..
AF306516	.GA..T.T.....T...AAA	C..AA	AA	.TG.....AG.CCC..
AF306517	.GA..T.T.....T...AAA	C..AA	AA	.TG.....AG.CCC..
St. Louis encephalitis virus				
BFS1750	.T...T.....T...CA	.CTTG	..	.A.....AA.CCG..C
1750-Std	.T...T.....T...CA	.CTTG	..	.A.....AA.CCG..C
TD6-4G	.T...T.....T...CA	.CTTG	..	.A.....AA.CCG..C
Coav750	.T...T.....T...CA	.CTTG	..	.A.....AA.CCG..C
L695121.05	.T...T.....T...CA	.CTTG	..	.A.....AA.CCG..C
TNW771K	.T...T.....T...CA	.CTTG	..	.A.....AA.CCG..C
MSI-7	.T...T.....T...CA	.CTTG	..	.A.....AA.CCG..C
Kern217	.T...T.....T...CA	.CTTG	..	.A.....AA.CCG..C
Coav808	.T...T.....T...CA	.CTTG	..	.A.....AA.CCG..C
TBH-28	.T...T.....T...CA	.CTTG	..	.A.....AA.CCG..C

VR1265 ..T...T.....T..A .CTTG .. A.....AA.CCG..C
Coav353AGAC.G.....A.....T....GTC.CGCT....T....CA .CTTG .. A.....AA.CCG..C
Murray Valley encephalitis virus
VR77 .CC.....GC.....T... AAGA G T.....AG..CG.CA.G.G.T..C.....ACT.T
AF161266 .CC.....GC.....T... AAGA G T.....AG..CG.CA.G.G.T..C.....ACT.T
MS172 .CC.....GC.....T... AAGA G T.....AG..CG.CA.G.G.T..C.....ACT.T
Dengue virus type 1
U88537 AT...GT.GCA.....T.....T.CCRAGAC AC..CGCAGCA GC GG.....A.ACC.GG
G.....CCCTG.TG.T.....A.....CC.ACA.C.....T.CCRAGAC AC..CGCAGCA GC GG.....A.ACC.GG
U88536 AT...GT.GCA.....T.....T.CCRAGAC AC..CGCAGCA GC GG.....A.ACC.GG
G.....CCCTG.TG.T.....A.....CC.ACA.C.....T.CCRAGAC AC..CGCAGCA GC GG.....A.ACC.GG
U88535 AT...GT.GCA.....T.....T.CCRAGAC AC..CGCAGCA GC GG.....A.ACC.GG
G.....CCCTG.TG.T.....A.....CC.ACA.C.....T.CCRAGAC AC..CGCAGCA GC GG.....A.ACC.GG
M87512 AT...GT.GCA.....T.....T.CCRAGAC AC..CGCAGCA GC GG.....A.ACC.GG
G.....TCCG.TG.T.....A.....CG.ATC.C.T.....T.CCRAGAC AC..CGCAGCA GC GG.....A.ACC.GG
AV206457 AT...GT.GCA.....T.....T.CCRAGAC AC..CGCAGCA GC GG.....A.ACC.GG
G.....CC.TG.TG.T.....A.....CC.ACA.C.....T.CCRAGAC AC..CGCAGCA GC GG.....A.ACC.GG
AV145123 AT...GT.GCA.....T.....T.CCRAGAC AC..CGCAGCA GC GG.....A
G.....CC.ACA.C.....T.CCRAGAC AC..CGCAGCA GC GG.....A.ACC.GG
AY145122 AT...GT.GCA.....T.....T.CCRAGAC AC..CGCAGCA GC GG.....A.ACC.GG
G.....CTC.T.Y.....A.....CC.ACA.C.....T.CCRAGAC AC..CGCAGCA GC GG.....A.ACC.GG
AY145121 AT...GT.GCA.....T.....T.CCRAGAC AC..CGCAGCA GC GG.....A.ACC.GG
G.....CTC.T.Y.....A.....CC.ACA.C.....T.CCRAGAC AC..CGCAGCA GC GG.....A.ACC.GG
AF514889 AT...GT.GCA.....T.....T.CCRAGAC AC..CGCAGCA GC GG.....A.ACC.GG
G.....CC.TG.TG.T.....A.....CC.ACA.C.....T.CCRAGAC AC..CGCAGCA GC GG.....A.ACC.GG
AF514885 AT...GT.GCA.....T.....T.CCRAGAC AC..CGCAGCA GC GG.....A.ACC.GG
G.....CC.TG.TG.T.....A.....CC.ATA.C.....T.CCRAGAC AC..CGCAGCA GC GG.....A.ACC.GG
AF514883 AT...GT.GCA.....T.....T.CCRAGAC AC..CGCAGCA GC GG.....A.ACC.GG
G.....CC.TG.TG.T.....A.....CC.ATA.C.....T.CCRAGAC AC..CGCAGCA GC GG.....A.ACC.GG
AF514878 AT...GT.GCA.....T.....T.CCRAGAC AC..CGCAGCA GC GG.....A.ACC.GG
G.....CC.TG.TG.T.....A.....CC.ACA.C.....T.CCRAGAC AC..CGCAGCA GC GG.....A.ACC.GG
AF514876 AT...GT.GCA.....T.....T.CCRAGAC AC..CGCAGCA GC GG.....A.ACC.GG
G.....CC.TG.TG.T.....A.....CC.ATA.C.....T.CCRAGAC AC..CGCAGCA GC GG.....A.ACC.GG
AF513110 AT...GT.GCA.....T.....T.CCRAGAC AC..CGCAGCA GC GG.....A.ACC.GG
G.....CCCTG.TG.T.....A.....CC.ACA.C.....T.CCRAGAC AC..CGCAGCA GC GG.....A.ACC.GG
AF350498 AT...GT.GCA.....T.....T.CCRAGAC AC..CGCAGCA GC GG.....A.ACC.GG
G.....CCCTG.TG.T.....A.....CC.ATA.C.....T.CCRAGAC AC..CGCAGCA GC GG.....A.ACC.GG
AF311958 AT...GT.GCA.....T.....T.CCRAGAC AC..CGCAGCA GC GG.....A.ACC.GG
G.....CC.TG.TG.T.....A.....CC.TCA.C.....T.CCRAGAC AC..CGCAGCA GC GG.....A.ACC.GG
AF311957 AT...GT.GCA.....T.....T.CCRAGAC AC..CGCAGCA GC GG.....A.ACC.GG
G.....CC.TG.TG.T.....A.....CC.ACA.C.....T.CCRAGAC AC..CGCAGCA GC GG.....A.ACC.GG
AF311956 AT...GT.GCA.....T.....T.CCRAGAC AC..CGCAGCA GC GG.....A.ACC.GG
G.....CC.TG.TG.T.....A.....CC.ACA.C.....T.CCRAGAC AC..CGCAGCA GC GG.....A.ACC.GG
AF310148 AT...GT.GCA.....T.....T.CCRAGAC AC..CGCAGCA GC GG.....A.ACC.GG
G.....CCCTG.TG.T.....

AF310147 AT...GT.GCA.....T.....T.CCACAAC AC..CGCAGCA GCGG.....A.ACC.GG
G.....CCCTG.TG.T.....A.....CC..ATA.C.T.
AF310146 AT...GT.GCA.....T.....T.CCTAGAC AT..CGCAGCA GCGG.....A.ACC.TG
G.....CCCTG.TG.T.....A.....CC..ACA.C.....
AF309641 AT...GT.GCA.....T.....T.CCGAAC AT..CGCAGCA GCGG.....A.ACC.GG
G.....CCCTG.TG.T.....A.....CC..ATA.C.T.
AF298808 AT...GT.GCA.....T.....T.CCACAAC AC..CGCAGCA GCGG.....A.ACC.GG
G.....CCCTG.TG.T.....A.....CC..ATA.C.T.
AF298807 AT...GT.GCA.....T.....T.CCACAAC AT..CGCAGCA GCGG.....A.ACC.GG
G.....CCCTG.TG.T.....A.....CC..ACA.C.....
AF226687 AT...GT.GCA.....T.....T.CCAGAC AT..CGCAGCA GCGG.....A.ACC.GG
G.....CCCTG.TG.T.....A.....CC..ACA.C.....
AF226686 AT...GT.GCA.....T.....T.CCAGAC AT..CGCAGCA GCGG.....A.ACC.GG
G.....CCCTG.TG.T.....A.....CC..ACA.C.....
AF226685 AT...GT.GCA.....T.....T.CCTAGAC AT..CGCAGCA GCGG.....A.ACC.TG
G.....CCCTG.TG.T.....A.....CC..ACA.C.....
AF180818 AT...GT.GCA.....T.....T.CCAGAC AC..CGCAGCA GCGG.....A.ACC.GG
G.....CCCTG.TG.T.....A.....CC..GTA.C.T.
AF180817 AT...GT.GCA.....T.....T.CCAGAC AC..CGCAGCA GCGG.....A.ACC.GG
G.....CCCTG.TG.T.....A.....CC..GTA.C.T.
GA.....CCCTG.TG.T.....A.....CC..ATA.T.T.
AB074760 AT...GT.GCA.....T.....T.CCACAAC AC..CGCAGCA GCGG.....A.ACC.GG
G.....CCCTG.TG.T.....A.....CC..ATA.C.T.
VR344-3 AT...GT.GCA.....T.....T.CCAGAC AC..CGCAGCA GCGG.....A.ACC.GG
G.....CCCTG.TG.T.....A.....CC..ATA.C.T.
Denque virus type 2
AF022434 AT...CGT.GT.....C.....T.CCTT AC A..TGGCAGCAACAATGGG.....AGGC..GA T.....TCTC.CT.....A.....CCCGA
A.C.GA
AF022435 AT...CGT.GT.....C.....T.CCTC AC A..TGGCAGCAACAATGGG.....AGGC..GA T.....TCTC.CT.....A.....CCCGA
A.C..A
AF022436 AT...CGT.GT.....C.....T.CCTT AC A..TGGCAGCAACAATGGG.....AGGC..GA T.....TCTC.CT.....A.....CCCGA
A.C..A
AF022437 AT...CGT.GT.....C.....T.CCTT AC A..TGGCAGCAACAATGGG.....AGGC..GA T.....TCTC.CT.....A.....CCCGA
A.C..A
AF022438 AT...CGT.GT.....C.....T.CCTT AC A..TGGCAGCAACAATGGG.....AGGC..GA T.....TCTC.CT.....A.....CCCGA
A.C..A
AF022439 AT...CGT.GT.....C.....T.CCTT AC A..TGGCAGCAACAATGGG.....AGGC..GA T.....TCTC.CT.....A.....CCCGA
A.C..A
AF022440 AT...CGT.GT.....C.....T.CCTC AC A..TGGCAGCAACAATGGG.....AGGC..GA T.....TCTC.CT.....A.....CCCGA
A.C..A
AF022441 AT...CGT.GT.....C.....T.CCTC AC A..TGGCAGCAACAATGGG.....AGGC..GA T.....TCTC.CT.....A.....CCCGA
A.C..A
AF038402 AT...CGT.GT.....C.....T.CCTT AC A..TGGCAGCAACAATGGG.....AGGC..GA T.....TCTCCT.....A.....CCCAA
A.C..A
AF038403 AT...CGT.GT.....C.....T.CCTT AC A..TGGCAGCAACAATGGG.....AGGC..GA T.....TCTCCT.....A.....CCCAA
A.C..A
AF100145 AT...CGT.GT.....C.....T.CCTT AC A..TGGCAGCAACAATGGG.....AGGC..GA T.....TCTCCT.....A.....CCCAA
A.T..A

AF100146 AT..CGT.GT.....C.....T.CCTT AC A..TCGCAGCAACAATGGG.....AGGC..GA T.....TCTC.CT.....A.....CCCGA
AGC..A.
AF100147 AT..CGT.GT.....C.....T.CCTT AC A..TCGCAGCAACAATGGG.....AGGC..GA T.....TCTC.CT.....A.....CCCGA
A.C..A.
AF100148 AT..TGT.GT.....C.....T.CCTT C AG.TCGCAGCAACAATGGG.....AGG..GA T.....TCTCACT.....A.....CCCAA
A.C..A.
AF100149 AT..CGT.GT.....C.....T.CCTT AC AG.TCGCAGCAACAATGGG.....AGG..GA T.....CCTCACT.....A.....CCCAA
A.C..A.
AF100150 AT..CGT.GT.....C.....T.CCTT AC A..TCGCAGCAACAACGGG.....AGG..GA T.....TCTCACT.....A.....CCCAA
A.C..A.
AF100151 AT..CGT.GT.....C.....T.CCTT AC AG.TCGCAGCAACAATGGG.....AGG..GA T.....TCTCACT.....A.....CCCAA
G.C..A.
AF100458 AT..CGT.GT.....C.....T.CCTT AC AG.TCGCAGCAACAATGGG.....AGG..GA
TCTCACT.....A.....CCCAA
AF100459 AT..CGT.GT.....C.....T.CCTT AC A..TCGCAGCAACAATGGG.....AGGC..GA T.....TCTC.CT.....A.....CCCGA
A.C..A.
AF100460 AT..CGT.GT.....C.....T.CCTT AC A..TCGCAGCAACAATGGG.....AGGC..GA T.....TCTC.CT.....A.....CCCGA
A.C..A.
AF100461 AT..CGT.GT.....C.....T.CCTT AC A..TCGCAGCAACAATGGG.....AGGC..GA T.....TCTC.CT.....A.....CCCGA
A.C..A.
AF100462 AT..CGT.GT.....C.....T.CCTT AC A..TCGCAGCAACAATGGG.....AGGC..GA T.....TCTC.CT.....A.....CCCGA
A.C..A.
AF100463 AT..CGT.GT.....C.....T.CCTT AC A..TCGCAGCAACAATGGG.....AGGC..GA T.....TCTC.CT.....A.....CCCGA
A.C..A.
AF100464 AT..CGT.GT.....C.....T.CCTT AC A..TCGCAGCAACAATGGG.....AGGCA.GA T.....TCTC.CT.....A.....CCCGA
A.C..A.
AF100465 AT..CGT.GT.....C.....T.CCTT AC AG.TCGCAGCAACAATGGG.....AGG..GA T.....TCTCACT.....A.....CCCAA
G.C..A.
AF100466 AT..CGT.GT.....C.....T.CCTT AC A..TCGCAGCAACAACGGG.....AGG..GA T.....TCTCACT.....A.....CCCAA
A.T..A.
AF100467 AT..CGT.GT.....C.....T.CCTT AC AG.TCGCAGCAACAATGGG.....AGG..GA
TCTCACT.....A.....CCCAA
AF100468 AT..CGT.GT.....C.....T.CCTT AC AG.TCGCAGCAACAATGGG.....AGG..GA
TCTCACT.....A.....CCCAA
AF100469 AT..CGT.GT.....C.....T.CCTT C AG.TCGCAGCAACAATGGG.....TGG..GA T.....TCTCACT.....A.....CCCAA
A.C..A.
AF119661 AT..CGT.GG.....C.....T.CCTT AC A..TCGCAGCAACAACGGG.....AGG..GA T.....TCTCACT.....ATT.....CCCAA
A.C..A.
AF169687 AT..CGT.GT.....C.....T.CCTC AC A..TCGCAGCAACAATGGG.....AGGC..GA T.....TCTC.CT.....A.....CCCGA
A.C..A.
AF169678 AT..CGT.GT.....C.....T.CCTC AC A..TCGCAGCAACAATGGG.....AGGC..GA T.....TCTC.CT.....A.....CCCGA
A.C..A.
AF169688 AT..CGT.GT.....C.....T.CCTC AC A..TCGCAGCAACAATGGG.....AGGC..GA T.....TCTC.CT.....A.....CCCGA
A.C..A.
AF169679 AT..CGT.GT.....C.....T.CCTT AC A..TCGCAGCAACAATGGG.....AAG..GA T.....TCTCACT.....A.....CCCGA
A.C..A.
AF169680 AT..CGT.GT.....C.....T.CCTC AC A..TCGCAGCAACAATGGG.....AGGC..GA T.....TCTC.CT.....A.....CCCGA
A.C..A.

AF169681 AT..CGT.GT.....C.....T.CCTC AC A..TCGCAGCAACAATGGG.....AGGC..GA T.....TCTC.CT.....A.....CCCGA
A.C..A.
AF169682 AT..CGT.GT.....C.....T.CCTC AC A..TCGCAGCAACAATGGG.....AGGC..GA T.....TCTC.CT.....A.....CCCGA
A.C..A.
AF169683 AT..CGT.GT.....C.....T.CCTC AC A..TCGCAGCAACAATGGG.....AGGC..GA T.....TCTC.CT.....A.....CCCGA
A.C..A.
AF169684 AT..CGT.GT.....C.....T.CCTC AC A..TCGCAGCAACAATGGG.....AGGC..GA T.....TCTC.CT.....A.....CCCGA
A.C..A.
AF169685 AT..CGT.GT.....C.....T.CCTC AC A..TCGCAGCAACAATGGG.....AGGC..GA T.....TCTC.CT.....A.....CCCGA
A.C..A.
AF169686 AT..CGT.GT.....C.....T.CCTC AC A..TCGCAGCAACAATGGG.....AGGC..GA T.....TCTC.CT.....A.....CCCGA
A.C..A.
AF204177 AT..CGT.GT.....C.....T.CCTT AC A..TCGCAGCAACAATGGG.....AGG...GA T.....TCTCACT.....A.....CCCAA
A.C..A.
AF204178 AT..CGT.GT.....C.....T.CCTT AC A..TCGCAGCAACAATGGG.....AGG...GA T.....TCTCACT.....A.....CCCAA
A.C..A.
AF208496 AT..CGT.GT.....C.....T.CCTT AC A..TCGCAGCAACAATGGG.....AGG...GA T.....TCTCACT.....A.....CCCAA
A.C..A.
AF276619 AT..CGT.GT.....C.....T.CCTT GC A..TCGCAGCAACAATGGG.....AGG...GA T.....TCTCACT.....A.....CCCGA
A.T..A.
AF309950 AT..CGT.GT.....C.....T.CCTT AC A..TCGCAGCAACAATGGG.....AGG...GA T.....TCTCACT.....A.....CCCGA
A.T..A.
AF309951 AT..CGT.GT.....C.....T.CCTT AC AG..TCGCAGCAACAATGGG.....AGG...GA TA.....TCTCACC.....A.....CCCAA
A.C..A.
AF305592 AT..TGT.GT.....C.....T.CCTT AA G..TCGCAGCAAAATGGG.....AGG..TG.
T.....CCCACT.....C.....A.....CCAG.....A.
AF309953 GT..TGT.GT.....C.....T.CCTT AA G..TCGCAGCAAAAATGGG.....AGG..TG.
T.....CCCACT.....A.....CCAG.....A.
AF309954 AT..TGT.GT.....C.....T.CCTT AA G..TCGCAGCAAAAATGGG.....AGG..TG.
T.....CCCACT.....A.....CCAG.....A.
AF309955 AT..TGT.GT.....C.....T.CCTT AA G..TCGCAGCAAAATGGG.....AGG..TG.
T.....CCCACT.....A.....CCAG.....A.
AF309956 AT..TGT.GT.....C.....T.CCTT AA G..TCGCAGCAAAATGGG.....AGG..TG.
T.....CCCACT.....A.....CCAG.....A.
AF309957 AT..TGT.GT.....C.....T.CCTT AA G..TCGCAGCAAAATGGG.....AGG..TG.
T.....CCCACT.....A.....CCAG.....A.
AF309958 AT..CGT.GT.....C.....T.CCTT AC A..TCGCAGCAACAATGGG.....AGG...GA T.....TCTCACT.....A.....CCCGA
A.T..A.
AF309959 AT..TGT.GT.....C.....T.CCTT AA A..TCGCAGCAAAAATGGG.....AGG..TGG T.....CCACATT.....A.....CCCAG
A.C..A.
AF309960 AT..CGT.GT.....C.....T.CCTT AC A..TCGCAGCAACAATGGG.....AGG...GA T.....TCTCACT.....A.....CCCGA
A.T..A.
AF309961 AT..TGT.GT.....C.....T.CCTT AA GG..TCGCAGCAAAATGGG.....AGG..TGG T.....CCACACT.....A.....CCCA
A..T..A.
AF309962 AT..CGT.GT.....C.....T.CCTT GC A..TCGCAGCAACAATGGG.....AGG...GA T.....TCTCACT.....A.....CCCGA
A.T..A.
AF309963 AT..CGT.GT.....C.....T.CCTT AC A..GTGCAGCAGCAATGGG.....AGG...GA T.....TCTCACT.....A.....CCCGA
A.T..A.

AF309964	AT..CGT.GT.....C.....	T.CCTT AC	A..TCGAGCAACAATGGG.....	AGG...GA T.....	TCTCACT.....	A.....	CCCGA
A.T..A.							
AF309965	AT..CGT.GT.....C.....	T.CCTT C	AG.TCGAGCAACAATGGG.....	AGG...GA T.....	TCTCACT.....	A.....	CCCAA
A.C..A							
AF359579	AT..CGT.GT.....C.....	T.CCTT GC	A..TCGAGCAACAATGGG.....	AGG...GA T.....	TCTCACT.....	A.....	CCCGA
A.T..A.							
AF489932	AT..CGT.GT.....C.....	T.CCTT AC	A..TCGAGCAACAACGGG.....	AGG...GA T.....	TCTCACT.....	A.....	CCCAA
A.C..A							
AJ487271	AT..CGT.GT.....C.....	T.CCTT AC	A..TCGAGCAACAATGGG.....	AGGC..GA T.....	TCTC CT.....	A.....	CCCGA
A.C..A							
AY037116	AT..CGT.GT.....C.....	T.CCTT AC	A..TCGAGCAACAATGGG.....	AGG...GA T.....	TCTCACT A.....	A.....	CCCGA
A.T..A							
M19197	AT..CGT.GT.....C.....	T.CCTT AC	AG.TCGAGCAACAATGGG.....	AGG...GA T.....	TCTCACT.....	A.....	CCCAA
A.C..A							
M20558	AT..CGT.GT.....C.....	T.CCTT AC	A..TCGAGCAACAACGGG.....	AGG...GA T.....	TCTCACT.....	A.....	CCCAA
A.C..A							
M29095	AT..CGT.GT.....C.....	T.CCTT AC	A..TCGAGCAACAATGGG.....	AGG...GA T.....	TCTCACT.....	A.....	CCCAA
A.C..A							
M84727	AT..CGT.GT.....C.....	T.CCTT AC	A..TCGAGCAACAATGGG.....	AGGC..GA T.....	TCTC CT.....	A.....	CCCGA
A.C..A							
M84728	AT..CGT.GT.....C.....	T.CCTT AC	A..TCGAGCAACAATGGG.....	AGGC..GA T.....	TCTC CT.....	A.....	CCCGA
A.C..A							
U61245	AT..CGT.GT.....C.....	T.CCTT AC	A..TCGAGCAACAATGGG.....	AGGC..GA T.....	TCTC CT.....	A.....	CCCGA
A.C.GA.							
U61246	AT..CGT.GT.....C.....	T.CCTC AC	A..TCGAGCAACAATGGG.....	AGGC..GA T.....	TCTC CT.....	A.....	CCCGA
R.C..A							
U61247	AT..CGT.GT.....C.....	T.CCTC AC	A..TCGAGCAACAATGGG.....	AGGC..GA T.....	TCTC CT.....	A.....	CCCGA
A.C..A							
U61248	AT..CGT.GT.....C.....	T.CCTT AC	A..TCGAGCAACAATGGG.....	AGGC..GA T.....	TCTC CT.....	A.....	CCCGA
A.C..A							
U87411	AT..CGT.GT.....C.....	T.CCTT AC	A..TCGAGCAACAATGGG.....	AGGC..GA T.....	TCTC CT.....	A.....	CCCGA
A.C..A							
U87412	AT..CGT.GT.....C.....	T.CCTT AC	A..TCGAGCAACAATGGG.....	AGGC..GA T.....	TCTC CT.....	A.....	CCCGA
A.C..A							
VR345-2	AT..CGT.GT.....C.....	T.CCTT AC	A..TCGAGCAACAATGGG.....	AGGC..GA T.....	TC.C CT.....	A.....	CCCGA
A.C..A							
Denque virus type 3							
AF310149	AC..TGT.GCA.....C.....	T.CCATGAC	AC..CGCAGCA	CGCG.....GAG.ACTGAGG.....	CC..CTTGCA.....	A.....	CC..A
A.T..							
M93130	AC..TGT.GCA.....T.....	T.CCATGAC	AC..CGCAGCA	CGCG.....GAG.ACTGAGG.....	CC..CTTGCA.....	TA.....	CC..A
A.C..							
AF317645	AC..TGT.GCA.....T.....	T.CCATGAC	AC..CGCAGCA	CGCG.....GAG.ACTGAGG.....	CC..CTTGCA.....	TA.....	CC..A
A.C..							
AY099336	AC..TGT.GCA.....C.....	T.CCATGAC	AC..CGCAGCA	CGCG.....GAG.ACTGAGG.....	CC..CTTGCA.....	A.....	CC..A
A.T..							
AY099337	AC..TGT.GCA.....C.....	T.CCATGAC	AC..CGCAGCA	CGCG.....GAG.ACTGAGG.....	CC..CTTGCA.....	A.....	CC..A
A.T..							
AY099343	AC..TGT.GCA.....C.....	T.CCATGAC	AC..CGCAGCA	CGCG.....GAG.ACTGAGG.....	CC..CTTGCA.....	A.....	CC..A
A.T..							

AY099344	AC..TGT.GCA.....C.....	T.CCATGAC	AC..CGCAGCA	GCGG.....GAG.ACTGAGG.....	CC..CTTGCA.....	A.....	CC...A
AY099345	AC..TGT.GCA.....C.....	T.CCATGAC	AC..CGCAGCA	GCGG.....GAG.ACTGAGG.....	CC..CTTGCA.....	A.....	CC...A
AY099346	AC..TGT.GCA.....C.....	T.CCATGAC	AC..CGCAGCA	GCGG.....GAG.ACTGAGG.....	CC..CTTGCA.....	A.....	CC...A
AY099347	AC..TGT.GCA.....C.....	T.CCATGAC	AC..CGCAGCA	GCGG.....GAG.ACTGAGG.....	CC..CTTGCA.....	A.....	CC...A
VR1256-3	AC..TGT.GCA.....T.....	T.CCATGAC	AC..CGCAGCA	GCGG.....GAG.ACTGAGG.....	CC..CTTGCA.....	TA.....	CC...A
VR1256-5	AC..TGT.GCA.....T.....	T.CCATGAC	AC..CGCAGCA	GCGG.....GAG.ACTGAGG.....	CC..CTTGCA.....	TA.....	CC...A
Denque virus type 4							
M14931	GT..CAT.TT.....C.....	T.CCATCACTGACA...	CGCAGCA	AA.GGG.....GAAGCC.GGAG.....	CTC.T.T.T.....	A.....	CCCAACA
AF289029	GT..CAT.TT.....C.....	T.CCATCACCACAA...	CGCAGCA	AA.GGG.....GAAGCC.GGAG.....	CTC.T.T.T.....	A.....	CCCAACA
AF310150	GT..CAT.TT.....T.....	T.CCATTA.CAACA..	CGCAGCA	AA.GGG.....GAG.C.GGAT.....	CTC.T.AT.....		
AF310152	GT..CAT.TT.....T.....	T.CCATTA.CAACA..	CGCAGCA	AA.GGG.....GAG.C.GGAT.....	CTC.T.AT.....		
AF310153	GT..CAT.TT.....C.....	T.CCATCACTGACA...	CGCAGCA	AA.GGG.....GAAGCC.GGAG.....	CTC.T.T.T.....	A.....	CCCAACA
AF326573	GT..CAT.TT.....C.....	T.CCATCACTGACA...	CGCAGCA	AA.GGG.....GAAGCC.GGAG.....	CTC.T.T.T.....	A.....	CCCAACA
AF326825	GT..CAT.TT.....C.....	T.CCATCACTGATA...	CGCAGCA	AA.GGG.....GAAGCC.GGAG.....	CTC.T.T.T.....	A.....	CCCAACA
AF326826	GT..CAT.TT.....C.....	T.CCATCACTGACA...	CGCAGCA	AA.GGG.....A.....		A.....	CCCAACA
AF326827	GT..CAT.TT.....C.....	T.CCATCACTGACA...	CGCAGCA	AA.GGG.....A.....		A.....	CCCAACA
AF375822	GT..CAT.TT.....C.....	T.CCATCACTGACA...	CGCAGCA	AA.GGG.....GAAGCC.GGAG.....	CTC.T.T.T.....	A.....	CCCAACA
AY152039	GT..CAT.TT.....C.....	T.CCATCACTGACA...	CGCAGCA	AA.GGG.....GAAGCC.GGAG.....	CTC.T.T.T.....	A.....	CCCAACA
AY152043	GT..CAT.TT.....C.....	T.CCATCACTGACA...	CGCAGCA	AA.GGG.....GAAGCC.GGAG.....	CTC.T.T.T.....	A.....	CCCAACA
AY152047	GT..CAT.TT.....C.....	T.CCATCACTGACA...	CGCAGCA	AA.GGG.....GAAGCC.GGAG.....	CTC.T.T.T.....	A.....	CCCAACA
AY152051	GT..CAT.TT.....C.....	T.CCATCACTGACA...	CGCAGCA	AA.GGG.....GAAGCC.GGAG.....	CTC.T.T.T.....	A.....	CCCAACA
AY152055	GT..CAT.TT.....C.....	T.CCATCACTGACA...	CGCAGCA	AA.GGG.....GAAGCC.GGAG.....	CTC.T.T.T.....	A.....	CCCAACA
AY152059	GT..CAT.TT.....C.....	T.CCATCACTGACA...	CGCAGCA	AA.GGG.....GAAGCC.GGAG.....	CTC.T.T.T.....	A.....	CCCAACA
AY152063	GT..CAT.TT.....C.....	T.CCATCACTGACA...	CGCAGCA	AA.GGG.....GAAGCC.GGAG.....	CTC.T.T.T.....	A.....	CCCAACA
AY152067	GT..CAT.TT.....C.....	T.CCATCACTGACA...	CGCAGCA	AA.GGG.....GAAGCC.GGAG.....	CTC.T.T.T.....	A.....	CCCAACA
AY152071	GT..CAT.TT.....C.....	T.CCATCACTGACA...	CGCAGCA	AA.GGG.....GAAGCC.GGAG.....	CTC.T.T.T.....	A.....	CCCAACA

[illegible]

[illegible]

[illegible]

AY152171	GT..CAT.TT.....C.....T.CCATCACTGACA...CGCAGCA	AA.GGG.....GAAGCC.GGAG.....CTC.T..T.....A.....	CCCAACA
<u>C..</u>			
VR217-1	GT..CAT.TT.....C.....T.CCATCACTAACA...CGCAGCA	AAAGGG.....GAAGCC.GGAG.....CTC.T..T.....A.....	CCCAACA
<u>C..</u>			

*Two potential binding sites for SEQ ID NOS.: 28 & 70 can be found in this region. These are denoted by single underline for SEQ ID NO.: 28, and shading for SEQ ID NO.: 70.

KY1129 5'-GTAAGCC CTCAGAACCTCTCGGAA-3'

WNV

AF317203	.....
AF196835	.....
AF260967	.....
AF260968	.....
AF260969	.....
AF481864	.....
M12294	.....
AF206518	.....
AF317203	.....
AF202541	.....
AF404757	.....
AF404753	.....
AF404754	.....
AF404755	.....
AF404756	.....
AF017254	.....
L48977	.....
AF196536	.....
AF196537	.....
AF196538	.....
AF196540	.....
AF196541	.....
AF196542	.....
AF196543	.....
AF458343	.....C.....
AF458344	.....
AF458347	.....
AF458348	.....
AF458350	.....
AF458352	.....C.....
AF458353	.....
AF458355	.....
AF458358	.....
AF458360	.....
AF458361	.....
AF208017	.....
AF196539	.....
AF196535	.....
AF458359	.....
AF458357	.....
AF458354	.....
AF458349	.....
AF458345	.....
AF458346	.....T.....T.....
AF533540	.....

JEV

AB051292	.A.....
AF014160	.A.....
AF014161	.A.....
AF045551	.A.....
AF069076	.A.....
AF075723	.A.....
AF080251	.A.....G.....
AF098735	.A.....
AF098736	.A.....
AF098737	.A.....
AF217620	.A.....
AF221499	.A.....
AF221500	.A.....
AF254452	.A.....
AF254453	.A.....
AF315119	.A.....T.....
AF416457	.A.....
AF486638	.A.....
U14163	.A.....
U15763	.A.....

Fig. 4A

KY1129 5'-GTAAGCC CTCAGAACCGTCTCGGAA-3'

JEV cont.

L48961	.A.....
U47032	.A.....
M18370	.A.....
M55506	.A.....
L78128	.A.....
D90195	.A.....
D90194	.A.....
AF311748	.A.....
AF092550	.A.....
AF092552	.A.....
AF092553	.A.....
AF139531	.A.....
AF148900	.A.....
AF148902	.A.....
AF218068	.A.....
AF289816	.A.....
AF318291	.A.....
L48967	.A.....
L48968	.A..C.....
LS4067	.A.....
LS4068	.A.....
LS4069	.A.....
LS4070	.A.....
LS4071	.A.....
LS4072	.A.....
LS4122	.A.....
LS4123	.A.....
AF306514	.A.....
AF306515	.A.....T.....
AF306516	.A.....T.....
AF306517	.A.....A.....T.....

MVEV

AF161266	.A.....T.C.....
M35172	.A.....T.C.....
L48972	.A.....T.C.....
L48973	.A.....T.C.....
L48974	.A.....T.C.....C.....
L48975	.A.....T.C.....
L48976	.A.....T.C.....T.....

KUNJIN

AF458351	.....G.
AF458356	.....
AF297840	.....C.....
AF297841	.....
AF297842	.....
AF297843	.....
AF297844	.....
AF297845	.....
AF297846	.....C.....
AF297847	.....C.....
AF297848	.....
AF297849	.....
AF297850	.....C.....
AF297851	.....C.....GT
AF297852	.....C.....
AF297853	.....C.....
AF297854	.....
AF297855	.....
AF297856	.....
AF297857	.....G.....
AF297858
AF297859
L48978
L49311
D00246
L48979
L24512

KOUTANGO

L48980
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Fig. 4B

KY1130 5'-TCCTAGTCTA TCCCAGGTGTCAA-3'

WNV

AF196835
AF260967
AF260968
AF260969	.....
AF481864	.....
M12294	C.....
AF206518	.....
AF317203	.....
AF202541	.....
AF404757	.....
AF404753	.....
AF404754	.....
AF404755	.....
AF404756	.....
AF017254	.....A.....
L24512	.....

Kunjin

JEV

AB051292	...C.....T.....
AF014160	...C.....T.....
AF014161	...C.....T.....
AF045551	...C.C....T.....
AF069076	...C.....T.....
AF075723	...C.....T.....
AF080251	...C.....T.....
AF098735	...C.....T.....
AF098736	...C.....T.....
AF098737	...G.....TCT.....
AF217620	...C.....T.....
AF221499	...C.....T.....
AF221500	...C.....T.....
AF254452	...C.....T.....
AF254453	...C.....T.....
AF315119	...C.....T.....
AF416457	...C.....T.....
AF486638	...C...A..T.....
U14163	...C.....T.....
U15763	...C.....T.....
L48961	...C.....T.....
U47032	.....T.....
M18370	...C.....T.....
M55506	...C.....T.....
L78128	...C.....T.....
D90195	...C.....T.....
D90194	...C.....T.....
AF311748	...C.....T.....
AF306514	...C.C....T.....
AF306515	...C.....T.....
AF306516	...C.....T.....
AF306517	...C.C....T.....
D00037	...C.....T.....
M14933	...C.....T.....

MVEV

AF161266	.....TT.....
M35172	.....TT.....

Fig. 4C

KY1131 5'-GGACTAGAGGTTAGAGGAGACCCCGCG-3'

WNV

AF196835
 AF260967
 AF260968
 AF260969
 AF481864
 M12294T
 AF206518
 AF317203
 AF202541
 AF404757
 AF404753
 AF404754
 AF404755
 AF404756
 AF017254
 AF208017T.....A..T
 L24512T

Kunjia

JEV

AB051292T..
 AF014160T..
 AF014161T..
 AF045551T..
 AF069076T..
 AF075723T..
 AF080251T..
 AF098735T..
 AF098736T..
 AF098737T..
 AF217620T..
 AF221499T..
 AF221500T..
 AF254452T..
 AF254453T..
 AF315119T..
 AF416457T..
 AF486638T..
 U14163T..
 U15763T..
 L48961T..
~~L24512~~.....
 U47032T..
 M18370T..
 M55506T..
 L78128T..
 D90195T..
 D90194T..
 AF311748T..
 AF306514T..
 AF306515T..
 AF306516T..
 AF306517T..

MVEV

AF161266A.TC
 M35172A.TC

Fig. 4D